![seal] UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/052,325 | 03/31/1998 | JOHN E. STOCKENBERG | EMC-97-137 | 9015 |

7590 09/08/2004

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| EXAMINER |
|---|
| COLBERT, ELLA |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3624 | |

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/052,325 | STOCKENBERG ET AL. |
| | Examiner | Art Unit | |
| | Ella Colbert | 3624 | |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _01 June 2004_.

2a)☐ This action is **FINAL**.      2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _01 June 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## DETAILED ACTION

1.     Claims 1-20 are pending.  Claim 1 has been amended, the Specification has

been amended, and the drawing figures 3 and 4 have been amended in this

communication filed 06/01/04 entered as Response to Election/Restriction

Requirement.

2.     The Objection to the Drawing fig. 3 has been overcome by the amendment to the

drawing and is hereby withdrawn. The drawing has been reviewed and approved.

3.     The Amendment to the Specification to place the Specification in agreement with

figure 4 has overcome the objection to figure 4 and is hereby withdrawn.

4.     The Applicants' arguments were convincing regarding the restriction/election of

claims 1-20 in the previous Office Action and the restriction of claims 1-20 is hereby

withdrawn in view of the new ground(s) of rejection here below.

### Claim Rejections - 35 USC § 112

5.     The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.     Claims 1, 8, 9, 10, and 17 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

        Claim 1, lines 12-19 read "mean, within said first and second processes, for

allowing said first and second processes to determine whether communications from

said first and second process are  …, and, in response to … ".  This portion of the claim

limitation is confusing and unclear.  The wording of the claim language appears to be

redundant. The comma on both sides of the "and" is unnecessary and adds to the lack

of clarity of the claim. Claims 8, 9, 10, and 17 have a similar problem with the lack of

clarity and confusing claim language. These claims appear to have an issue with

redundancy too.

### *Claim Rejections - 35 USC § 103*

7.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.      Claims 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US

5,544,347) Yanai et al, hereafter Yanai in view of  (US 6,092,066) Ofek.

With respect to claim 1, Yanai teaches, teaches, at least one first communication

mechanism residing on both the first and second computers for facilitating

communications between the first and second processes that are each used with

backup or restore operations over the network (col. 4, lines 43-65 and fig. 1); a second

communication mechanism residing on both the first and second computers for

facilitating communication between the first and second processes through the data

storage system (col. 2, lines 37-67, col. 3, lines 1-40 and fig. 1 (36, 42, and 40)). Yanai

fails to teach, means within the first and second processes for allowing the first and

second processes to determine whether a communication from the first and second

processes is from first or second communication mechanism, wherein, in response to

determining if a communication is from said first communication mechanism then

communicating over said network and in response to determining if a communication is

from said first communication mechanism then communicating through said data

storage system. Ofek teaches, means within the first and second processes for

allowing the first and second processes to determine whether a communication from the

first and second processes is from the first or second communication mechanism,

wherein, in response to determining if a communication is from said first communication

mechanism then communicating over said network and in response to determining if a

communication is from said first communication mechanism then communicating

through said data storage system (col. 3, lines 27-67). It would have been obvious to

one having ordinary skill in the art at the time the invention was made to have a means

within the first and second processes for allowing the first and second processes to

determine whether a communication from the first and second processes is from the

first or second communication mechanism, wherein, in response to determining if a

communication is from said first communication mechanism then communicating over

said network and in response to determining if a communication is from said first

communication mechanism then communicating through said data storage system and

to modify in Yanai because such a modification would allow Yanai to have a

communication interface linked to the communication interface of the first and second

computer system for facilitating processes over a network.

With respect to claim 14, this dependent claim is rejected for the

similar rationale given above s for claim 1.

With respect to claim 17, this independent claim is rejected for the similar

rationale as given to claims 1 and 14.


9.     Claims 2-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over (US 5,544,347) Yanai et al, hereafter Yanai in view of (US

6,092,066) Ofek and further in view of (US 5,889,943) Ji et al, hereafter Ji.

With respect to claim 2, Yanai teaches, the first and second processes

are part of a backup or restore process (col. 6, lines 16-50).

With respect to claim 3, Yanai and Ofek failed to teach, at least one

first communication mechanism is a network socket. Ji teaches, at least one

first communication mechanism is a network socket (col. 6, lines 28-31 and

col. 8, lines 36-44). Network communications and socket calls used over the

network are well known to anyone skilled in the art, as described in

Applicants' Specification on page 18. It would have been obvious to one

having ordinary skill in the art at the time the invention was made to have the

first communication mechanism as a network socket and to modify in Yanai in

view of his teachings of a high speed communication link to a disk adapter

and point-to-point communication links and because such a modification

would allow Yanai to have a gateway node for controlling the transfer of files

to and from a given network.

With respect to claim 4, Yanai teaches, the second communication

mechanism is a data storage system socket (col. 4, lines 56-65).

With respect to claim 5, Yanai teaches, the backup and restore operations are capable of backing up and restoring information from a file system (col. 6, lines 37-67 and col. 7, lines 1-13). However, Yanai does not specifically disclose the system is a file system but a data storage system can be used to store files (defined as "blocks of information stored on disk, tape, or similar media containing a program, a document, or a collection of data").

With respect to claim 6, Yanai failed to teach, (a) establishing at least one first connection over a network between first and second processes that are each used with backup or restore operations and that are each residing on different computers, wherein, in response to determining if a communication is from the first communication mechanism then communicating over the network and in response to determining if a communication is from the first communication mechanism then communicating through the data storage system and (b) establishing in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system. Ji teaches, (a) establishing at least one first connection over a network between first and second processes that are each used with backup or restore operations and that are each residing on different computers, wherein, in response to determining if a communication is from the first communication mechanism then communicating over the network

and in response to determining if a communication is from the first

communication mechanism then communicating through the data storage

system (col. 8, lines 18-24 and lines 53-58).   Ji fails to teach,

(b) establishing in parallel with at least one first connection a second

connection through a data storage system between the first and the second

processes, wherein the second connection is configured to be responsively

used for communication over the data storage system.  Ofek teaches, (b)

establishing in parallel with at least one first connection a second connection

through a data storage system between the first and the second processes,

wherein the second connection is configured to be responsively used for

communication over the data storage system (col. 5, lines 25-47).  It would

have been obvious to one having ordinary skill in the art at the time the

invention was made to establish in parallel with at least one first connection a

second connection through a data storage system between the first and the

second processes, wherein the second connection is configured to be

responsively used for communication over the data storage system and to

modify in Yanai because such a modification would allow Yanai to connect to

a client and then to a server where the data is stored on a network.

        With respect to claim 7, Yanai and Ofek failed to teach, creating a first

pair of communication mechanisms on a designated port, wherein the first

pair includes a first communication mechanism and a second communication

mechanism.  Ji teaches, creating a first pair of communication mechanisms

on a designated port, wherein the first pair includes a first communication

mechanism and a second communication mechanism (col. 11, lines 14-53).

It would have been obvious to one having ordinary skill in the art at the time

the invention was made to create a first pair of communication mechanisms

on a designated port, wherein the first pair includes a first communication

mechanism and a second communication mechanism and to modify in Yanai

because such a modification would allow Yanai to have a first command port

for communication between client task(s) and the SMTP proxy server and the

SMTP proxy server spawns an SMTP daemon or SMTP server.

With respect to claim 8, Yanai and Ofek failed to teach, requesting the

first communication mechanism pair a connection to the second

communication mechanism pair  and in response to the connection request,

accepting the connection request.  Ji teaches, requesting the first

communication mechanism pair a connection to the second communication

mechanism pair (col. 10, lines 6-29) and in response to the connection

request, accepting the connection request (col. 10, 31-34 and lines 49-55).

This dependent claim is also rejected for the similar rationale as claim 7.  It

would have been obvious to one having ordinary skill in the art at the time the

invention was made to request the first communication mechanism pair a

connection to the second communication mechanism pair and in response to

the connection request, accepting the connection request and to modify in

Yanai because such a modification would allow Yanai to have a data transfer

request and file name sent first to the FTP daemon and then on to the server.

With respect to claim 9, Yanai and Ofek failed to teach, creating a

second pair of communication mechanisms on the designated port, wherein

the second pair includes a first communication mechanism and a second

communication mechanism and wherein the second pair of communication

mechanisms is used for transferring a different type of information than would

be transferred over the first pair of communication mechanisms. Ji teaches,

creating a second pair of communication mechanisms on the designated port,

wherein the second pair includes a first communication mechanism and a

second communication mechanism and wherein the second pair of

communication mechanisms is used for transferring a different type of

information than would be transferred over the first pair of communication

mechanisms (col. 10, lines 54-55 and col. 11, lines 4-53).

This dependent claim is also rejected for the similar rationale given for claim

7. It would have been obvious to one having ordinary skill in the art at the

time the invention was made to create a second pair of communication

mechanisms on the designated port, wherein the second pair includes a first

communication mechanism and a second communication mechanism and

wherein the second pair of communication mechanisms is used for

transferring a different type of information than would be transferred over the

first pair of communication mechanisms and to modify in Yanai because such

a modification would allow Yanai to send the file through the third poet to the

FTP proxy server and through the second port on the FTP proxy server and

finally through the first port to the client task.

With respect to claim 10, Yanai and Ofek failed to teach, requesting

with the first communication mechanism of the second pair of communication

mechanisms, a connection to the second communication mechanism of the

second pair of communication mechanisms.  Ji teaches, requesting with the

first communication mechanism of the second pair of communication

mechanisms, a connection to the second communication mechanism of the

second pair of communication mechanisms (col. 12, lines 1-17).

This dependent claim is rejected for the similar rationale given for claim 8.  It

would have been obvious to one having ordinary skill in the art at the time the

invention was made to request the first communication mechanism of the

second pair of communication mechanisms, a connection to the second

communication mechanism of the second pair of communication mechanisms

and to modify in Yanai because such modification would allow Yanai to

transmit through the second command port to the SMTP daemon and to

create a third command port and to bind the server task to the third command

port to establish communications between the server and the SMTP daemon.

With respect to claim 11, Yanai and Ofek failed to teach, creating a

third pair of communication mechanisms on a second designated port,

wherein the third pair includes a first communication mechanism and a

second communication mechanism. Ji teaches, creating a third pair of

communication mechanisms on a second designated port, wherein the third

pair includes a first communication mechanism and a second communication

mechanism (col. 8, lines 59-67 and col. 9, lines 1-67). It would have been

obvious to one having ordinary skill in the art at the time the invention was

made to create a third pair of communication mechanisms on a second

designated port, wherein the third pair includes a first communication

mechanism and a second communication mechanism and to modify in Yanai

because such a modification would allow Yanai to have a third command port

to the SMTP daemon with the SMTP daemon creating a third command port

for communication with the SMTP daemon for trans mission through the third

command port to the server task..

With respect to claim 12, Yanai and Ofek failed to teach, requesting

the first communication mechanism of the third pair of communications

mechanisms a connection to the second pair of communications

mechanisms. Ji teaches, requesting the first communication mechanism of

the third pair of communications mechanisms a connection to the second pair

of communications mechanisms (col. 8, lines 18-54).

This dependent claim is rejected for the similar rationale given for claims 8,

10, and 11. It would have been obvious to one having ordinary skill in the art

at the time the invention was made to request the first communication

mechanism of the third pair of communications mechanisms a connection to

the second pair of communications mechanisms and to modify in Yanai

because such a modification would allow Yanai to perform file transfers from

a controlled domain of a network across a medium to another network (a file

transfer from a node of the second network across the media to a second

node of the third network).

With respect to claim 13, Yanai teaches, receiving information about a

group of resources in the data storage system (col. 4, lines 50-56). Yanai and

Ofek failed to teach, in response to receiving information about the group of

resources, creating a fourth pair of communication mechanisms, wherein the

fourth pair includes a first communication mechanism and a second

communication mechanism and connecting the first communication

mechanism and the second communication mechanism of the fourth pair of

communication mechanisms to each other through the data storage system.

Ji teaches, in response to receiving information about the group of resources,

creating a fourth pair of communication mechanisms, wherein the fourth pair

includes a first communication mechanism and a second communication

mechanism (col. 9, lines 51-67); and connecting the first communication

mechanism and the second communication mechanism of the fourth pair of

communication mechanisms to each other through the data storage system

(col. 10, lines 18-31 and lines 49-55). It would have been obvious to one

having ordinary skill in the art at the time the invention was made to have in

response to receiving information about the group of resources, creating a

fourth pair of communication mechanisms, wherein the fourth pair includes a

first communication mechanism and a second communication mechanism

and connecting the first communication mechanism and the second

communication mechanism of the fourth pair of communication mechanisms

to each other through the data storage system and to modify in Yanai

because such a modification would allow Yanai to have the file transferred

through the proxy server through the first port to the client task then the task

is passed from the client to the FTP proxy server, then to the FTP daemon

and to the server task which in response sends the file through the third port

to the FTP daemon and through the second port on to the FTP proxy server

and finally through the first port to the client task.

With respect to claim 15, Yanai teaches, identifying resources on a

data storage device  to be used in order to transfer information through the

data storage device (col. 2, lines 57-67 and col. 3, lines 1-10).

This claim is also rejected for the similar rationale given for claims 6 and 13.

With respect to claim 16, this dependent claim is rejected for the similar rationale

given to claim 5.

With respect to claim 18, this dependent claim is rejected for the similar rationale

as given above for claim 3.

With respect to claim 19,  this dependent claim is rejected for the similar rationale

as given above for claim 4.

With respect to claim 20, this dependent claim is rejected for the similar rationale as given above for claim 5.

## *Response to Arguments*

10.    Applicants' arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. However, the Examiner has elected to address the following arguments for clarification purposes as responded to here below.

Issue no. 1: Applicants' argue Applicants' prepared and submitted a response that in Applicants' opinion, put the application in condition for allowance has been considered.

Response: The Examiner disagrees that the application is in condition for allowance for the following reason(s): there are outstanding 35 U.S.C. 112, second paragraph issues with the claims as addressed above which need clarification in the claim language and Applicants' need to particularly point out and to claim the novel feature of their invention in the independent claims. Where is this feature claimed in claims 1, 6, 15, and 17?

## *Conclusion*

11.    The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Sarkozy et al (US 5,893,919) disclosed storing data and mirroring.

Cannon et al (US 6,148,412) disclosed recovery of files using copy storage pools.

Cheffetz et al (US 5,133,065) disclosed a computer network for backing up data and program files.

Fortier et al (US 5,276,860) disclosed a processor for backup storage.

## Inquiries

12.    Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 703-308-7064. The examiner can normally be reached on Monday-Thursday from 6:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1038.  The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.  Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


E. Colbert
September 2, 2004

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E. Colbert
September 1, 2004